6AV6

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TWIN DIODE—HIGH-MU TRIODE

7-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC)	6.3 ± 10%	volts
Current	0.3	amp

Direct Interelectrode Capacitances:

	Without External Shield	*With External Shield*°	
Triode Unit:			
Grid to plate	2	2	μμf
Grid to cathode and heater	2.2	2.2	μμf
Plate to cathode and heater	0.8	1.2	μμf
Diode-No. 2 plate to triode grid	0.04 max.	0.04 max.	μμf

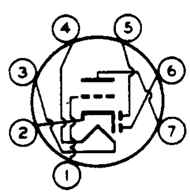
Characteristics, Class A_1 Amplifier (Triode Unit):

Plate Voltage	100	250	volts
Grid Voltage	−1	−2	volts
Amplification Factor	100	100	
Plate Resistance (Approx.)	0.08	0.0625	megohm
Transconductance	1250	1600	μmhos
Plate Current	0.5	1.2	ma

Mechanical:

Operating Position	Any
Maximum Overall Length	2-1/8"
Maximum Seated Length	1-7/8"
Length, Base Seat to Bulb Top (Excluding tip)	1-1/2" ± 3/32"
Diameter	0.650" to 0.750"
Dimensional Outline	*See General Section*
Bulb	T5-1/2
Base	Small-Button Miniature 7-Pin (JEDEC No. E7-1)
Basing Designation for BOTTOM VIEW	7BT

Pin 1 - Triode Grid
Pin 2 - Cathode
Pin 3 - Heater
Pin 4 - Heater



Pin 5 - Diode Plate No. 2
Pin 6 - Diode Plate No. 1
Pin 7 - Triode Plate

TRIODE UNIT — AMPLIFIER — Class A_1

Maximum Ratings, ***Design-Maximum Values:***

PLATE VOLTAGE	330	max.	volts
GRID VOLTAGE:			
Positive-bias value	0	max.	volts
PLATE DISSIPATION	0.55	max.	watt

← Indicates a change.

ELECTRON TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

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PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode. .	200	max.	volts
Heater positive with respect to cathode. .	200▲	max.	volts

Typical Operation as Resistance-Coupled Amplifier:

See RESISTANCE-COUPLED AMPLIFIER CHART No. 25 at front of this Section

DIODE UNITS — Two

→ **Maximum Ratings,** ***Design-Maximum Values:***

PLATE CURRENT (For each diode) . . . . 1 max. ma

→ **Characteristics:**

Values are for Each Unit

Plate Current for plate volts = 10 . . . . 2 ma

Diode Considerations:

Consideration of these units, including typical circuits and diode curves, is given at the front of this Section. Diode biasing of the triode unit of the 6AV6 is not suitable.

° With external shield JEDEC No.316 connected to cathode.
▲ The dc component must not exceed 100 volts.

Curves for the triode unit of the 6AV6 are the same as those shown for Type 12AX7

→ Indicates a change.